

Operation & Preventive Maintenance of Electrical Distribution Equipment

COURSE OVERVIEW

This technical course provides a practical understanding of the principles, components and procedures essential for reliable operation and maintenance of electrical distribution systems. The course curriculum covers the fundamentals of power distribution, inspection practices, preventive and predictive maintenance techniques, safety standards, troubleshooting and performance optimization of equipment such as transformers, switchgear, circuit breakers, relays and cabling systems. Through a blend of theory, case studies and practical insights, participants will be equipped with the skills needed to enhance system reliability, minimize downtime and extend equipment longevity.

WHO SHOULD ATTEND?

This course is designed for electrical engineers, technicians, supervisors, maintenance staff and operations personnel involved in the installation, operation and maintenance of electrical distribution systems. It is also highly beneficial for facility managers, utility staff, plant operators, and professionals seeking to strengthen their technical knowledge and ensure safe, efficient, and cost-effective management of electrical infrastructure.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Identify the components and functions of electrical distribution equipment.
- Apply best practices in the safe operation of switchgear, transformers, circuit breakers and related systems.
- Implement preventive maintenance strategies to minimize downtime and equipment failures.
- Diagnose and troubleshoot common operational issues effectively.
- Interpret technical documentation and maintenance schedules with accuracy.
- Enhance overall system reliability, efficiency, and safety through structured maintenance practices.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Cleaning and housekeeping to prevent dust, moisture, and equipment degradation.
- Testing and calibration of breakers, transformers, and protection devices for reliability.
- Lubrication and mechanical checks to prevent premature equipment failure.
- Best practices for visual inspections to detect wear, damage, and hazards early.
- Safe outage maintenance using proper lockout-tagout procedures.
- Documentation and scheduling of preventive tasks to extend lifespan and reduce downtime.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded